U.S. Department of Health & Human Services
Health Resources and Services Administration

Improving the quality of health care
HRSA Activities in Diabetes

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Center for Quality

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

new diabetes initiatives recently begun or under development at each agency or IC with an emphasis on those that provide opportunities for collaboration.

Health Resources and Services Administration (HRSA)

- **Assures** the availability of comprehensive, culturally competent, quality health care meeting the needs of low income, uninsured, isolated, vulnerable and special needs populations
- **Improves** the nation's health by improving health outcomes among America’s vulnerable populations
- **Serves** as an important part of America’s health care safety net
- **Recognizes** prevention as central to primary health care

HRSA Programs

- Health Professions
- Primary Health Care
- HIV/AIDS
- Maternal and Child Health
- Health Systems
- Minority Health
- Rural Health
- International Health Affairs

HRSA's 2005-2010 Strategic Plan

The HRSA mission:

"To provide national leadership, program resources and services to improve access to culturally competent, **quality** health care"

Complementary Paradigms

Public Health

POPULATION BASED
AGGREGATE DATA

and

Personal Health

INDIVIDUAL & FAMILY

HRSA

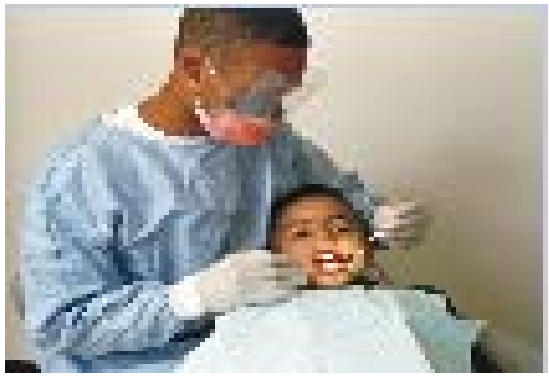
IMPROVING QUALITY OF HEALTH CARE

Translating Research to Practice

Translation of Research and Evaluation to Practice

Quality Care Aims

- Safe
- Effective
- Patient/ Family Centered
- Timely
- Efficient
- Equitable



Source: IOM study *Crossing the Quality Chasm: A New Health System for the 21st Century*

Office of Rural Health Policy
Rural Health Research Centers Program
Initiated in 1988

- Only Federal program dedicated to producing policy-relevant research on health care in rural areas
- Purpose:
  - Inform policy makers on problems of rural communities
    - access to health care.
  - Study critical issues facing rural communities
    - adequate, affordable, high quality health services
  - Research findings bridge gaps between policy and program needs
  - Assist in educating legislators and policymakers.
  - Train health services researchers.
- Eight Centers funded FY2004-2008
  - 5 General Centers
  - 3 Analytic Centers.
- www.ruralhealth.hrsa.gov,

Office of Rural Health Policy
Rural Health Research Centers Program

Analytic Centers

- NORC Walsh Center for Rural Health Analysis- Bethesda MD
- RUPRI Center for Rural Health Policy Analysis U. of Nebraska
- North Carolina rural Health Research and Policy Analysis Center University of North Carolina

•Funded 2005-2008

•www.ruralhealth.hrsa.gov,

General Centers

- Maine Rural Health Research Center University of Southern Maine
- South Carolina Rural Health Research Center USC
- Upper Midwest Rural Health research Center U of MN
- WICHE Center for Rural Mental Health Research Boulder CO
- WWAMI Rural Health Research Center U. of Washington

Maternal and Child Health Bureau

- Diabetes screening, education, prevention and treatment programs may be supported through Block grants to States.
- Health Start Initiative to reduce infant mortality includes services for diabetes for mothers and children
- School based and school-linked programs promote diabetes detecting and care.
- Leadeship education in Adolescent Health (LEAH) include diabetes education.

Healthcare Systems Bureau

- Works with Organ Procurement and Transplantation Network to facilitate allocation of pancreatic organs for use in pancreatic islet cell transplants.

HIV/AIDS Bureau

Ryan White CARE act-funded clinical programs

- Monitor, treat, provide patient education and nutritional counseling for complications of HIV treatment including changes in glucose metabolism

Office for the Advancement of Telehealth (OAT)

- 43 grantees
  - Services to improve management of patients with diabetes

Health Professions

- Grants to medical, dental, allied health and nursing education programs to strengthen education and practice in diabetes
- Geriatric Education Centers
- Area Health Education Center Program (AHECs)

HHS Partnerships

- **Steps to Healthier US**
  CDC Lead
- **Diabetes Detection Initiative (DDI)**
  - **CDC lead**
  - 48 Primary care clinics Majority HRSA Federally qualified Health centers or Look alikes
  - Primary Care Associations
  - 600,000 risk tests distributed
  - Increase ~ 40% of screening blood glucose tests in participating clinics.
  - 4,810 new cases of diabetes
- **Strokebelt elimination Initiative**
  - **HHS Office of Minority Health Lead**

Primary Health Care
Diabetes Detection Initiative (DDI)

- 10 regions
- 48 Primary care clinics Majority HRSA Federally qualified Health centers or Look alikes
- Primary Care Associations
- 600,000 risk tests distributed
- Increase ~ 40% of screening blood glucose tests in participating clinics.
- 4,810 new cases if diabetes
- Success varied by region

Steps to Healthier US
CDC Lead

- Purpose:
  - Promote community initiatives to improve health and prevent disease
    - Reduce burden of diabetes, overweight, obesity, asthma
    - Risk factors of : physical activity, poor nutrition and tobacco use
- Analyzed grants for 04 and 05
  - identified HRSA grantees identified for inclusion
  - Identified other HRSA grantees for inclusion
  - Working on IAA to strengthen HRSA support of Steps initiatives

HRSA
Health Center Program – CY 2004*

- **13.2 Million served**
- **53.0 Million patient encounters**
- **3,650 service sites**
- **90% below 200% poverty**
- **39% uninsured**
- **64% racial/ethnic minority**

- **Serve all ages**
  - **13%** **4 and under**
  - **14** **5-12 years**
  - **20** **13-24 years**
  - **46** **25-64 years**
  - **7** **65 and older**

*Estimated

HRSA
Bureau of Primary Health Care
Health Disparities Collaboratives

A national effort to improve health outcomes for all medically underserved people

HRSA's Health Disparities Collaboratives PARTNERSHIPS

- IHI
- Federal partners
  - HHS OS
  - AHRQ
  - CDC
  - EPA
  - NIH
  - SAMHSA
  - HRSA
    - MCHB, HAB, BHPr , Office Rural Health
- HRSA grantees
  - PCAs, NACHC,
- Non Federal partners

HRSA Health Disparities Collaboratives

The Care Model includes six essential elements for improving primary health care

- Patient self-management
- Evidence based decision support
- Clinical information system to monitor clinical outcomes
- Delivery system designed for patient and family goals
- Organization of health care for quality
- Community partnerships
    - Dr. E.Wagner /IHI

HRSA's
Health Disparities Collaboratives

1) Disease Collaboratives: Diabetes, Asthma, Depression, Cardiovascular, Depression, HIV/AIDS

2) Prevention Collaboratives: Diabetes Prevention, Cancer Screening, Prevention

3) Access and Redesign of Patient Flow

4) Community systems collaborative:
Perinatal and Patient Safety Collaborative

Moving to primary health care collaborative

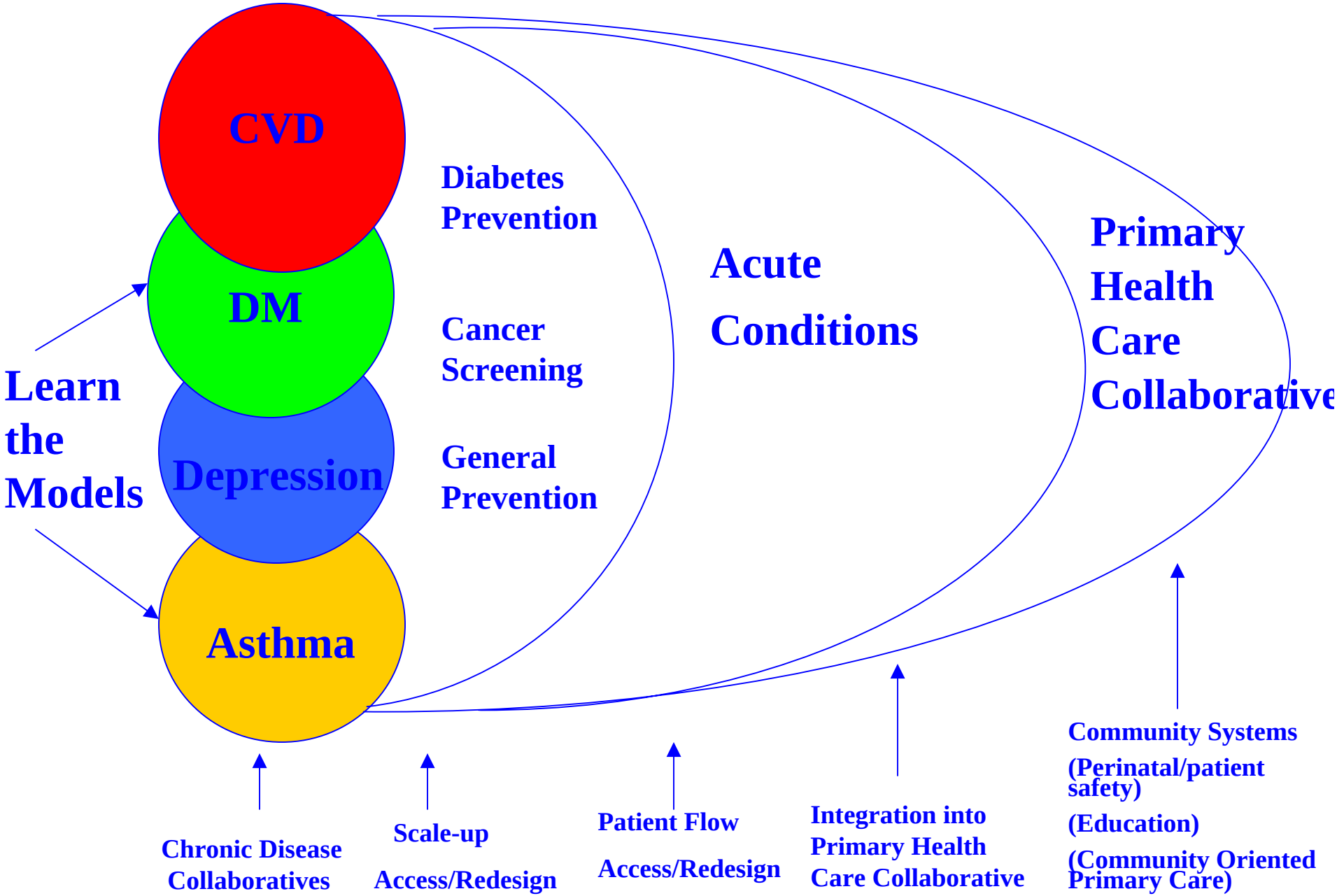
http://www.healthdisparities.net

HRSA's
Health Disparities Collaboratives
Four types of collaboratives

- Disease Collaboratives:
  - Diabetes, Asthma, Depression, Cardiovascular, Depression, HIV/AIDS
- Prevention Collaboratives:
  - Diabetes Prevention, Cancer Screening, Prevention
- Access and Redesign of Patient Flow
- Community systems collaborative:
  - Perinatal and Patient Safety Collaborative

http://www.healthdisparities.net

System Change for Quality Primary Health Care

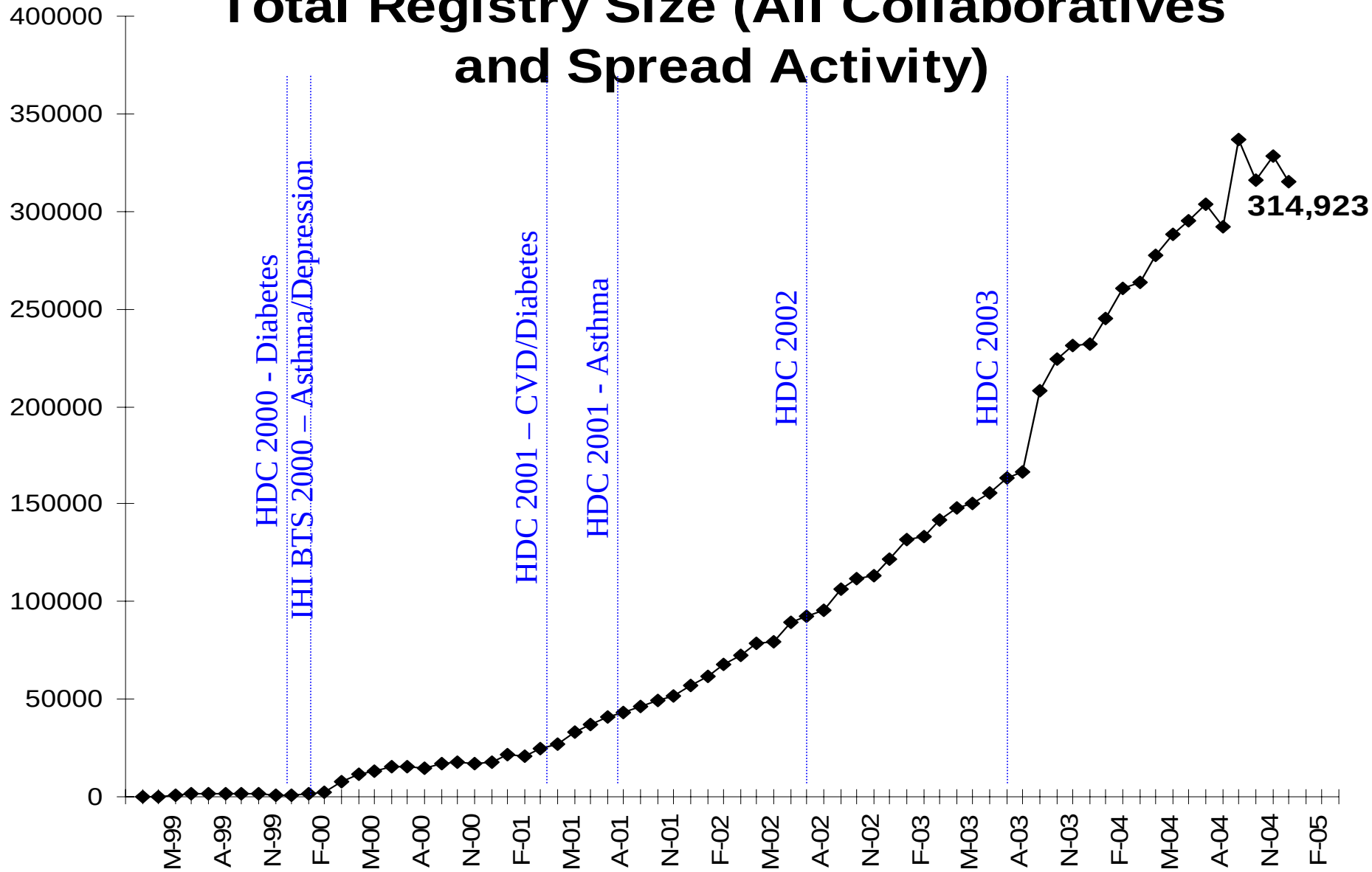


HRSA
Diabetes Collaborative

- **Core Outcome Measures**
  - Average glycosolated hemoglobin (HbA1C)
  - Patients with 2 HbA1Cs in last year at least 3 months apart
  - Documentation of self-management goal setting
  - Cardiac risk reduction options (ACE inhibitors or ARB medication OR statins)
  - Patients with blood pressure <130/80
- **Additonal Measures (selected)**
  - Patients with LDL <100
  - Aspirin or other antithrombotic agent use
  - Patients who are current smokers

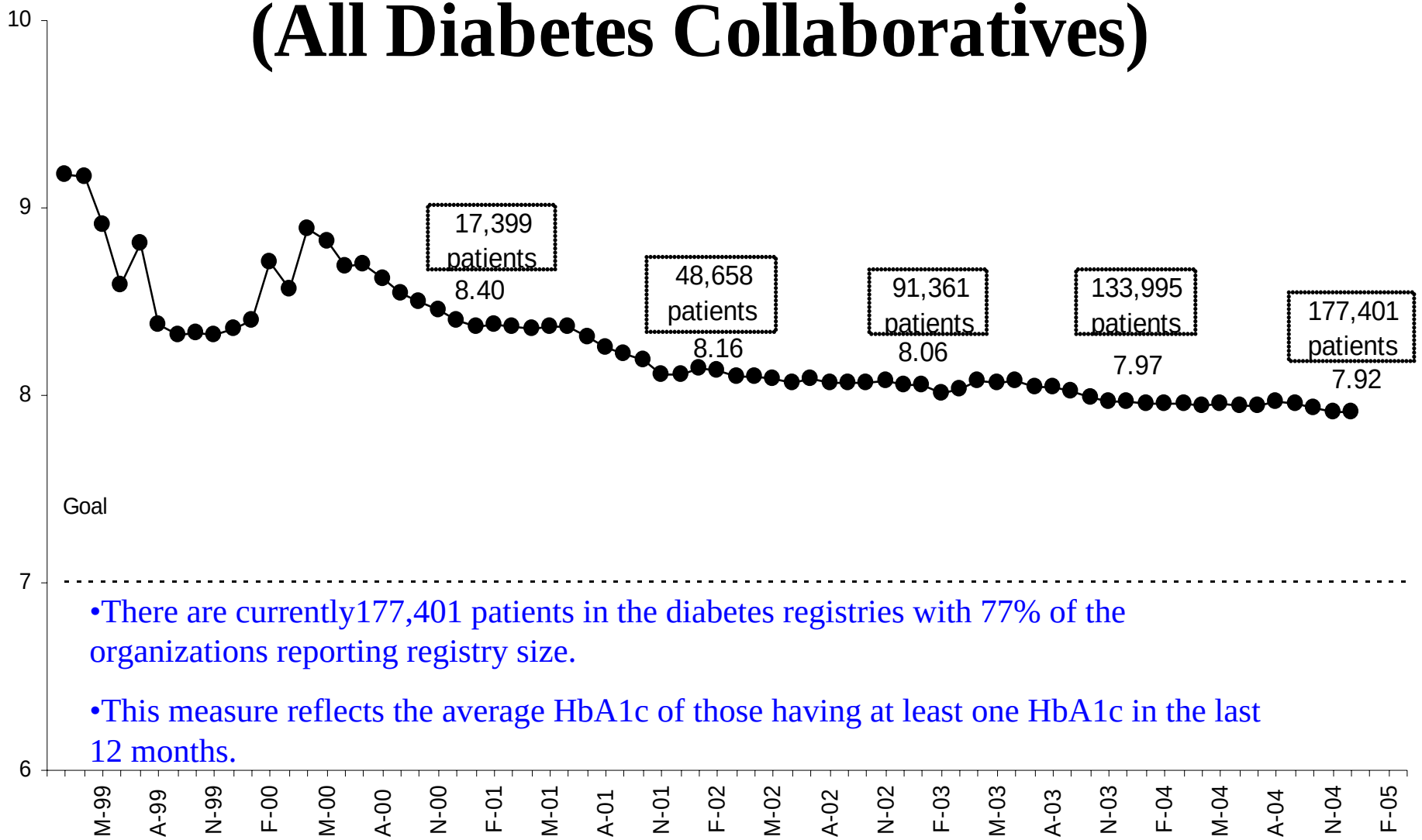
HRSA

HRSA's Health Disparities Collaboratives Total Registry Size (All Collaboratives and Spread Activity)



Source of data reported 1/1/05: Jlangley@apiweb.org; Slide preparation: chupke@nibcomp.com 2-2-05

Key Measures: Average HbA1c (All Diabetes Collaboratives)



- There are currently177,401 patients in the diabetes registries with 77% of the organizations reporting registry size.
- This measure reflects the average HbA1c of those having at least one HbA1c in the last 12 months.

Source of data reported 1/1/05: Jlangley@apiweb.org; Slide preparation: chupke@nibcomp.com 2-2-05

Diabetes Prevention Pilot 5 Health Centers HRSA's Health Disparities Collaboratives

- Identification and screening individuals at risk for type 2 diabetes
  - Gestational diabetes
  - Family members with diabetes
  - Impaired GTT
  - Body mass index ≥ 30
- Intervention-patient/family centered program
  - Weight reduction/healthy weight
  - Nutrition counseling
  - Exercise program (≥ minutes /week)
- Measures
  - Fasting GTT
  - Hb A1c 7.0 or fasting glucose < 125
  - Average weight loss ≥ 7%
- TRANSLATES THE DPP INTO PRACTICE IN HRSA SUPPORTED HEALTH CENTERS

The Diabetes Prevention Program* (DPP)

- NIH Funded Randomized Clinical Trial to Prevent Type 2 Diabetes in Persons at High Risk
- HRSA Supported Health Centers applied results of DPP research utilizing Health Disparities Collaboratives Care Models
  - 1) Prevent or delay the development of type 2 DM in persons with impaired glucose intolerance (IGT)
  - 2) Secondary goals: reduce CVD events, reduce CVD risk factors, reduce arteriosclerosis
- **Reduces delay of translating science to the benefit of patient care from > 10 years to < 1 year .**

Outcomes of Applying Science from **Diabetes Prevention Program** (DPP) To Health Center Patients with Pre Diabetes 04

Number of Patients Eligible for OGTT based on risk factors Family Hx BMI CVD	Number of Patients Screened with OGTT	Number of Pre-Diabetes Patients in the Registry	Number of Patients with Dx of Diabetes after screening	Number of pt with self- Manage-ment goal setting	Number of patients with>150 minutes of exercise per week
2883	910 (31.5%)	249 (27.3%)	145 (15.9%)	188 (75.5%)	59. 1 (23.7%)

Outcomes of Applying Science from **Diabetes Prevention Program** (DPP) Health Center Patients with Pre Diabetes '05

Number of Patients Eligible for OGTT based on risk factors Family Hx BMI CVD	Number of Patients Screened with OGTT	Number of Pre-Diabetes Patients in the Registry	Number of Patients with Dx of Diabetes after screening	Number of pt with self- Manage-ment goal setting	Number of patients with>150 minutes of exercise per week
6,333	2,392 (37.7%)	985 (41.1%)	409 (17.1%)	1528 (63.9%)	175 (17.8%)

HRSA BPHC
Health Disparities Collaborative
Prevention Prototype

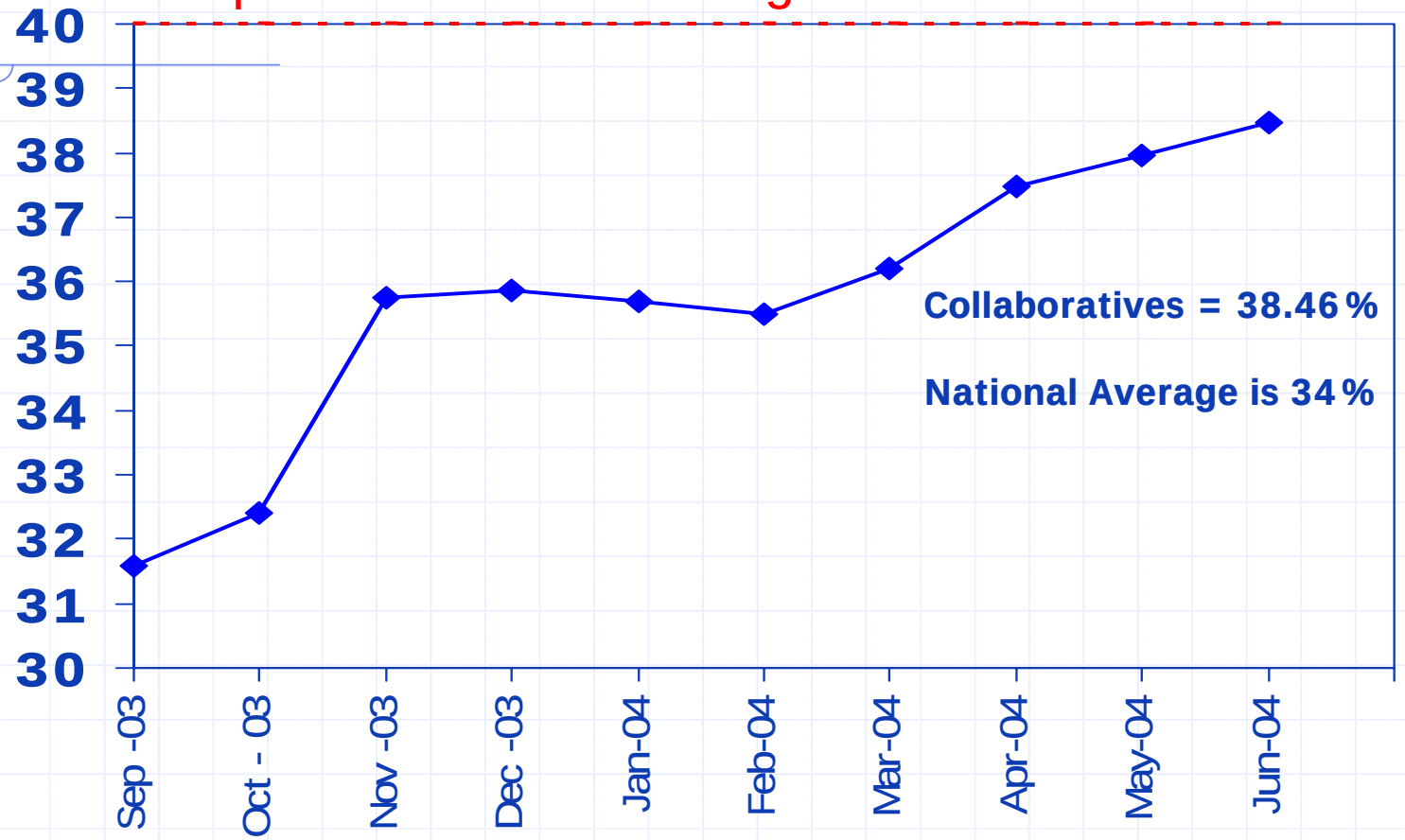
- **Pilot**
  - **5 Health Centers – 12-16 months**
- **Aim: Improve the system of preventive care by**
  - **Developing and refining interventions to reduce the gap between actual and desired delivery rates of preventive services**
- **Result:**
  - **Prevention prototype that leads to major improvements in levels of screening, coordination of F/U for diagnosis and treatment and documentation**

DIABETES PREVENTION COLLABORATIVE

KEY GOALS

- Weight loss
- At least 150 minutes of exercise per week (brisk walking or the equivalent)
- HbA1c <7.0 OR fasting glucose <125 mg/dl

Improvement in Control of Hypertension Among Patients in the Collaboratives Surpassed National Average in November 2003



Average Percent of CVD Patients with BP< 140/90 (Hypertension)
4,108 patients in the registries, June 2004.

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

Example from a Health Center
Access & Quality:
Chronic Disease Management

Bechara Choucair, M.D. Medical Director

Crusader Clinic, Rockford IL

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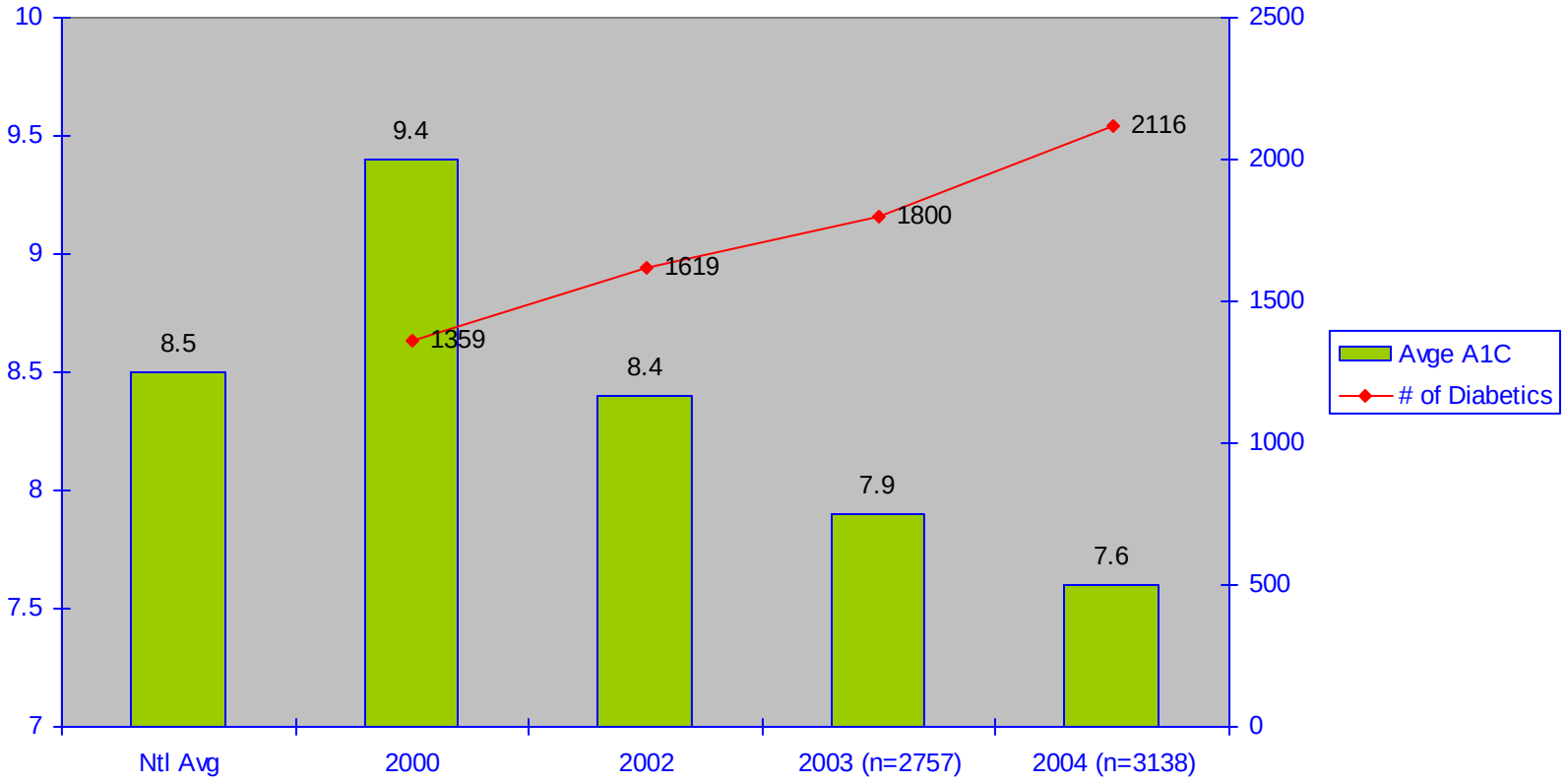
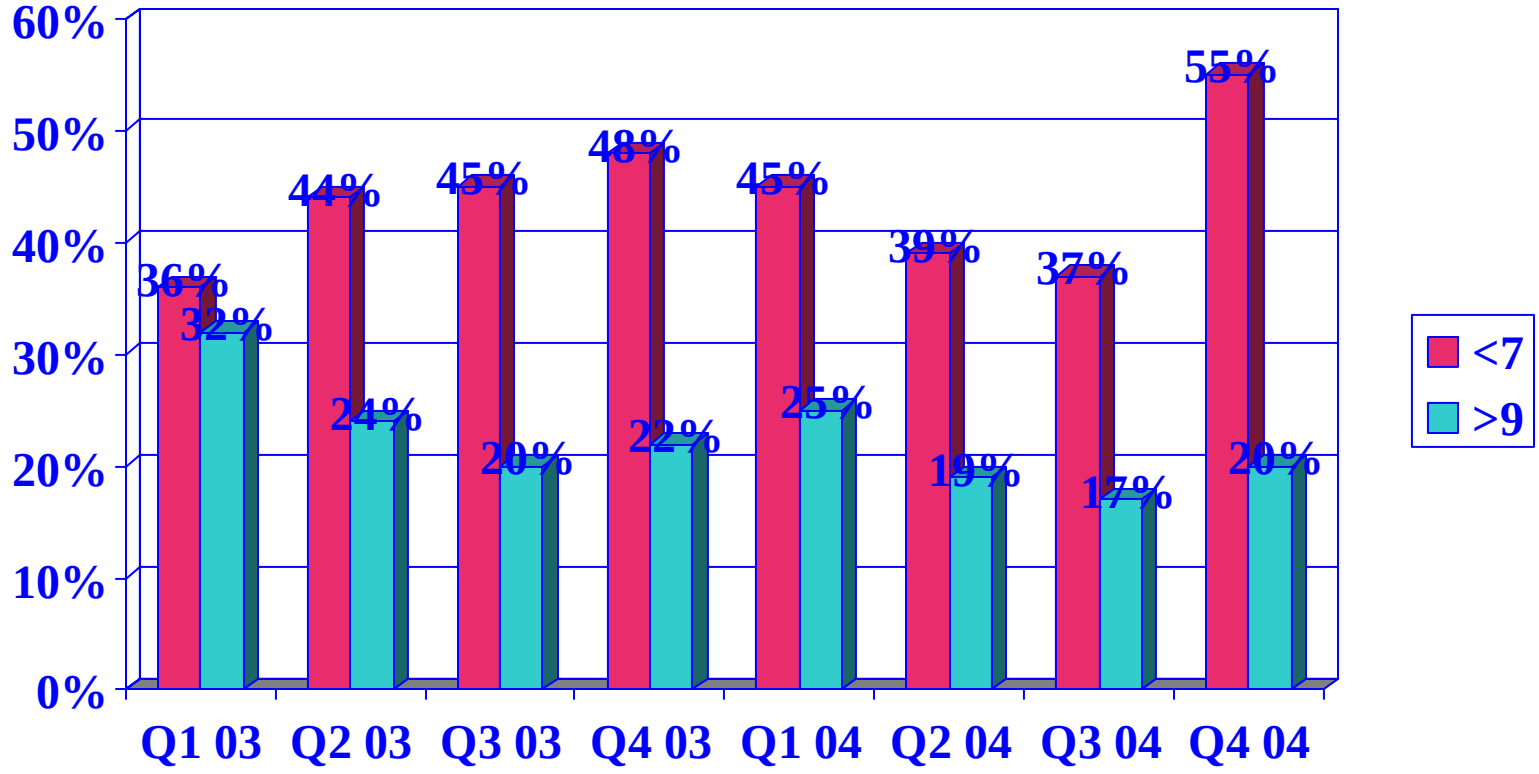
Crusader Clinic, Rockford IL Diabetes Data



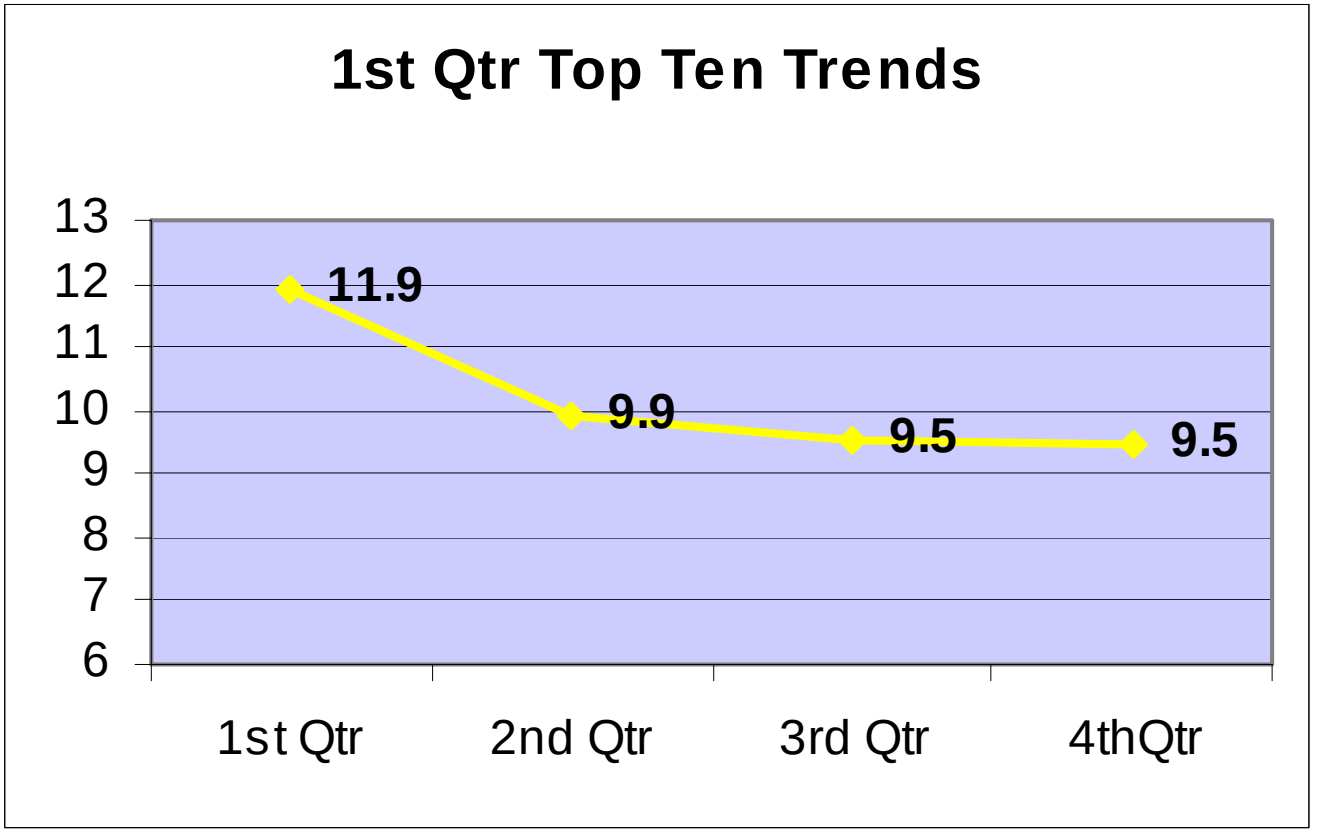
Crusader Clinic, Rockford IL
Average HbA1C



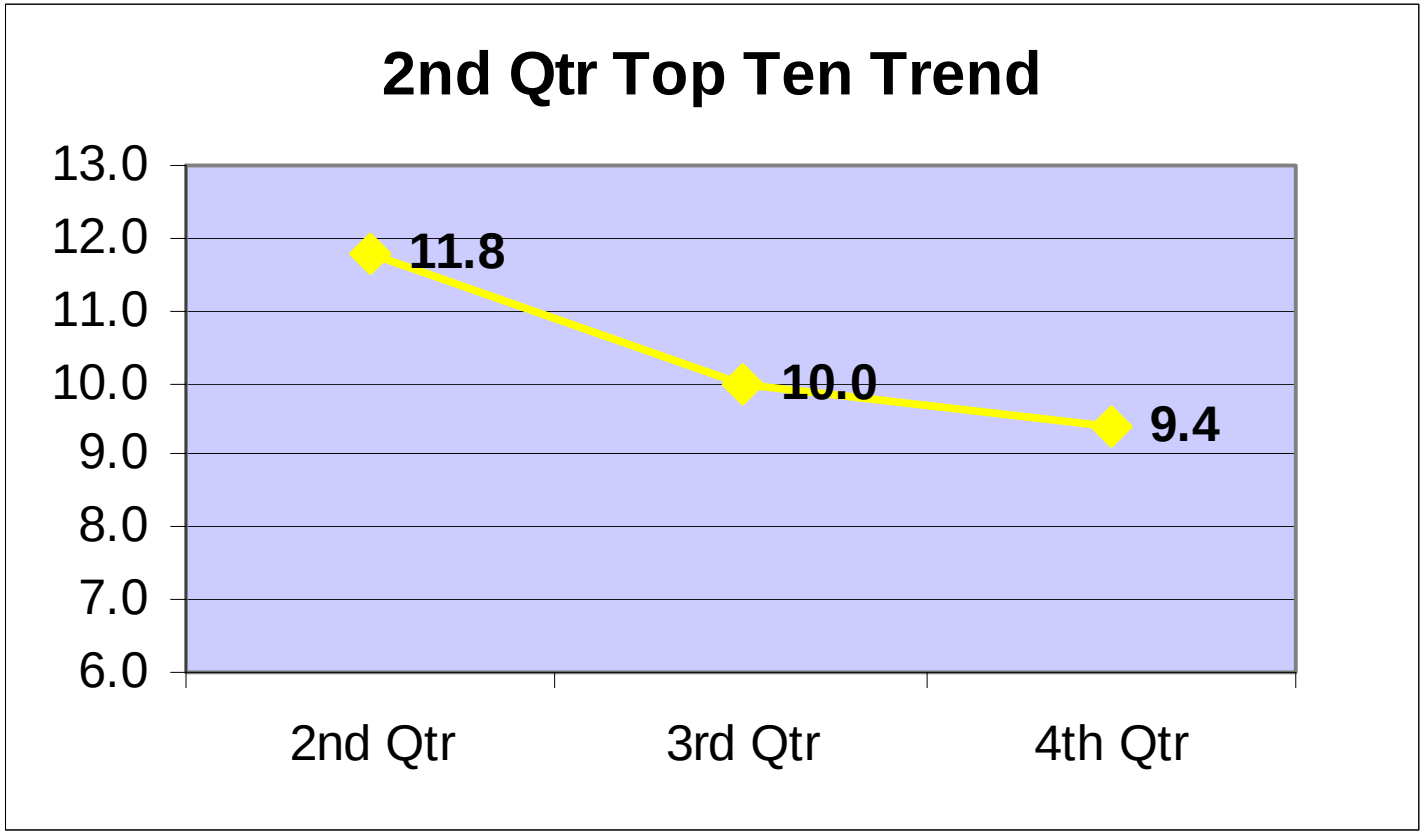
Crusader Clinic, Rockford IL
Diabetes Top 10
Division of Clinical Quality (DCQ) Report

- Every quarter, the DCQ staff pulls the charts of the 10 patients with the highest A1C for every provider (total of 180 charts) and intensive care management is provided to this group.

Crusader Clinic, Rockford IL
Top 10 A1C (Q1/2003)



Crusader Clinic, Rockford IL
Top 10 A1C Q2/2003



Crusader Clinic, Rockford IL DM Top 10 Outcomes

- In 2003 and 2004, 745 patients were intensively care managed through this initiative (401 in 03 and 344 in 04).
- 55% of patients had at least one follow up A1C within a year.
- As a result of this intervention, the average A1C for this group dropped by 2.2 percentage points.
- Intense care management resulted in a significant A1C drop and then we reached a plateau.
- A part time endocrinologist was hired to help with the management of this high risk group in Mid 2004. He helped with 23 patients in the last quarter of 2004.

Crusader Clinic, Rockford IL DM Top 10 Outcomes

- Intense care management resulted in a significant A1C drop and then we reached a plateau.
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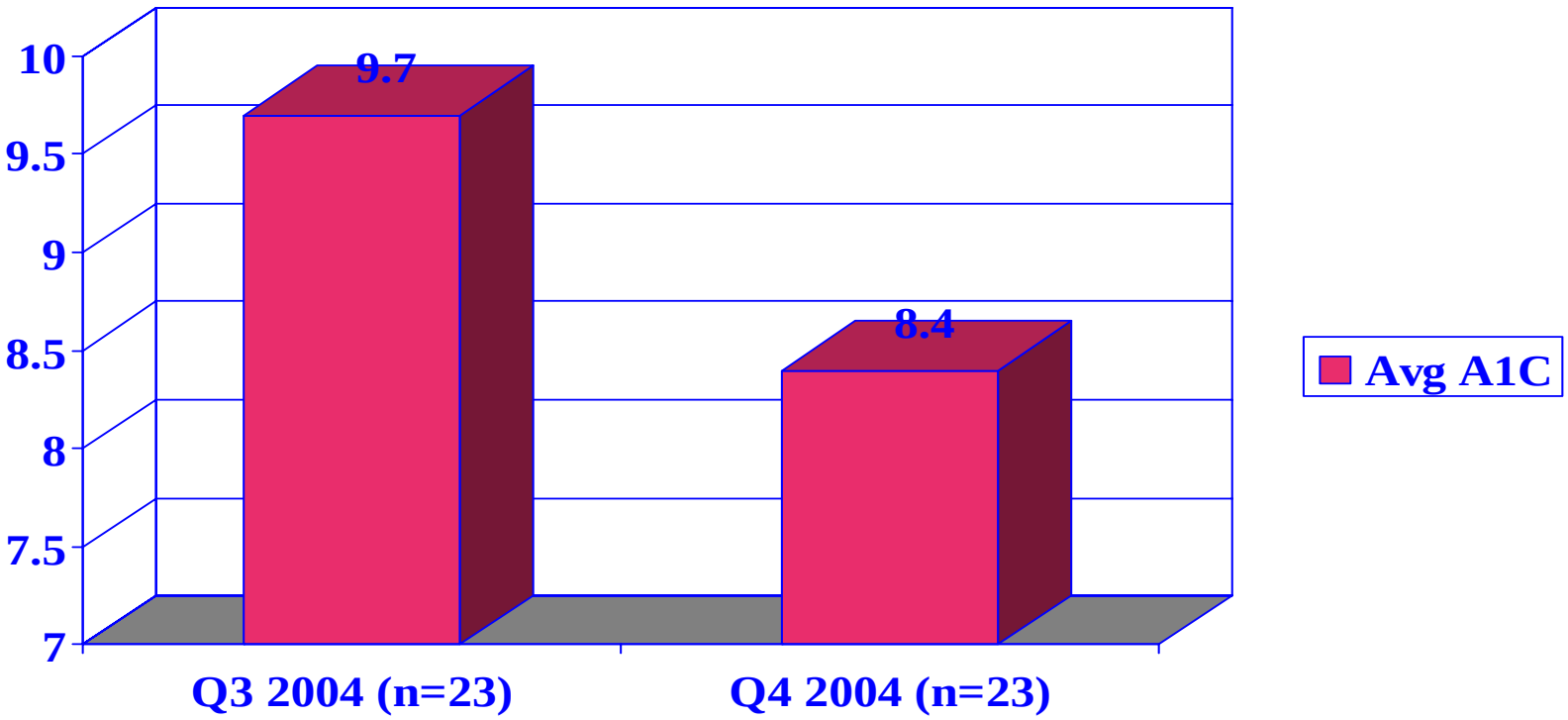
Crusader Clinic, Rockford IL
Endocrinology Role



The Sentinel Center Network

The SCN 2002 Database

October 29, 2004

Purpose of the SCN

- The primary goal is to provide information to HRSA and centers themselves to assess health center practice patterns and outcomes patients who use those centers. Specifically, the SCN assesses:
  - the healthcare needs of patients;
  - the quality of primary care;
  - practice patterns at health centers; and,
  - the efficiency of service delivery.

- A secondary goal is to improve the technical capabilities of Health Center organizations to generate, manage, and use clinical data stored in electronic formats.

HRSA BPHC
Data Sources

- Uniform data system (UDS)
- Patient electronic care system registry (PECS)
- Sentinel Center Network (SCN)
- User visit survey

HRSA Primary Health Care Sentinel Centers Network Representativeness of data N= 1.5 Million

- Gender
- Age
- Insurance
- Poverty
- Urban/rural
- Region
- Program
  - Community health center
  - Migrant health center
  - Health care for the homeless
  - Public housing
- Providers

HRSA
Primary Health Care
Sentinel Center Network

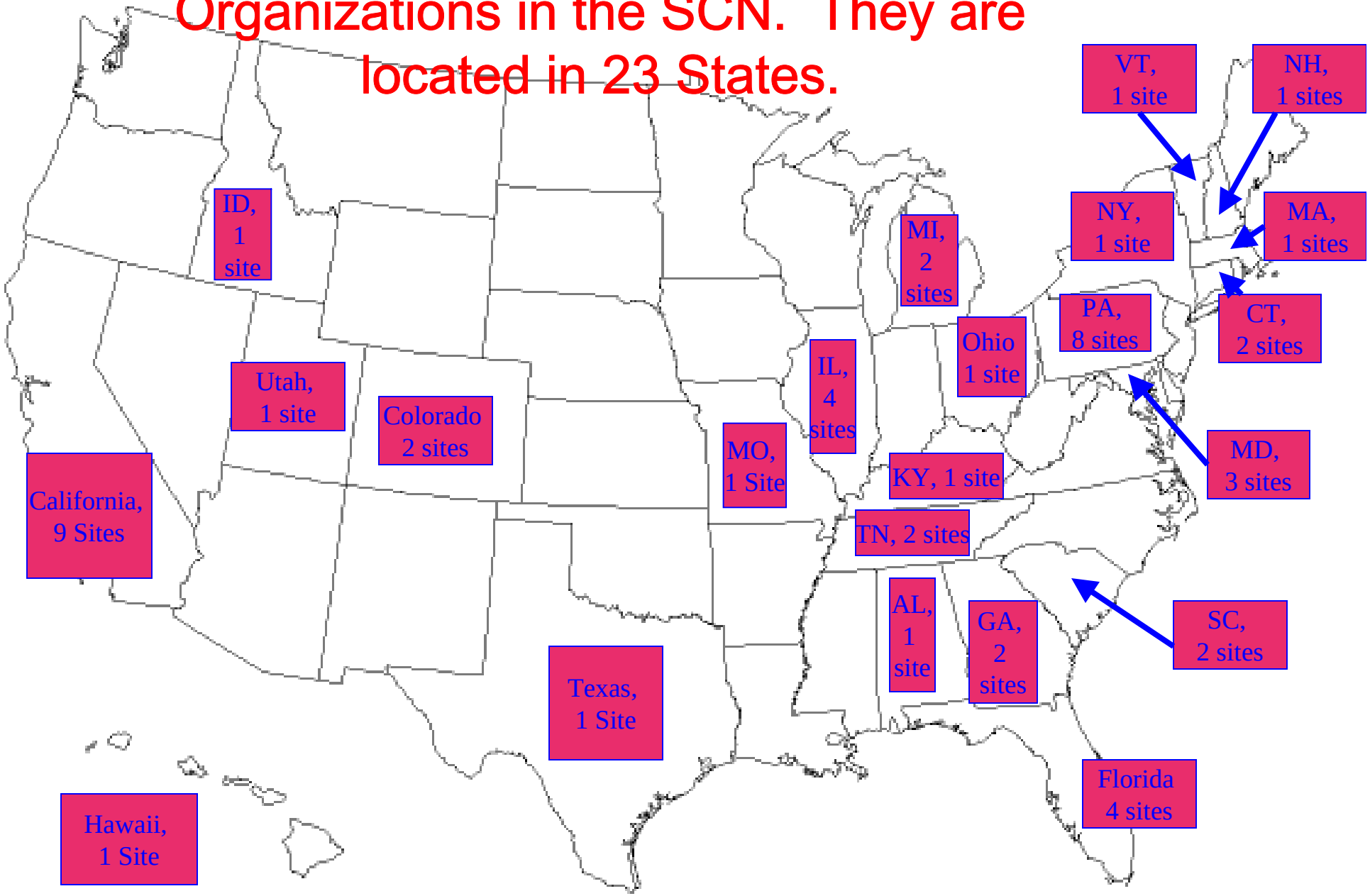
- Purpose:
  - Representative group of Health Centers – timely data to inform policy and quality improvement activities
- Data system:
  - Primary Care Surveillance System (PCSS)
- Data Source:
  - Existing HC data – Extracted
- Level of data:
  - Patient
- Number:
  - 1.5 Million; universe of pts at participating HCs
- Level of reporting
  - :Any Level

I. SCN Purpose and Composition

SCN Background

- The Sentinel Center Network (SCN) is funded by the Bureau of Primary Health Care, Health Resources and Services Administration.
- The SCN was founded in October 2003, when the first meeting of 36 health center organizations was convened.
- Seven new health center organizations are being added to the SCN during the latter part of calendar year 2004.

There are 52 Member Health Center Organizations in the SCN. They are located in 23 States.



Regional Distribution

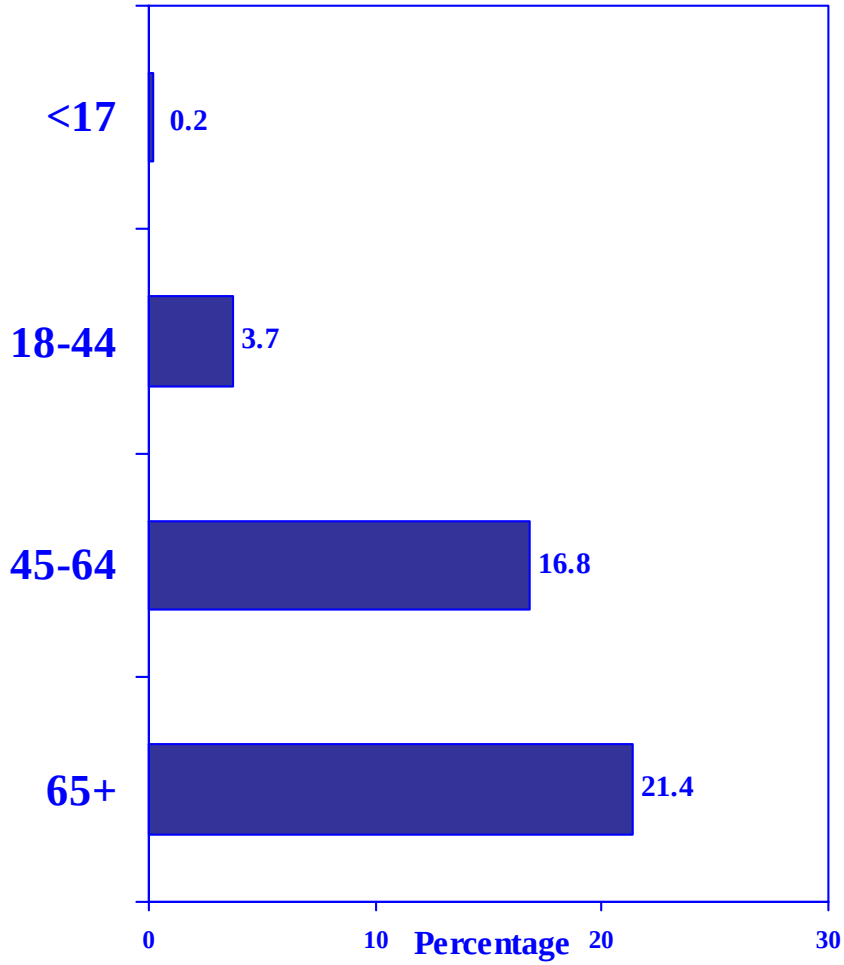
Regional Representation

- Northeast 16
- Midwest 9
- South 12
- West 15

The 52 health center organizations are evenly divided across census regions.

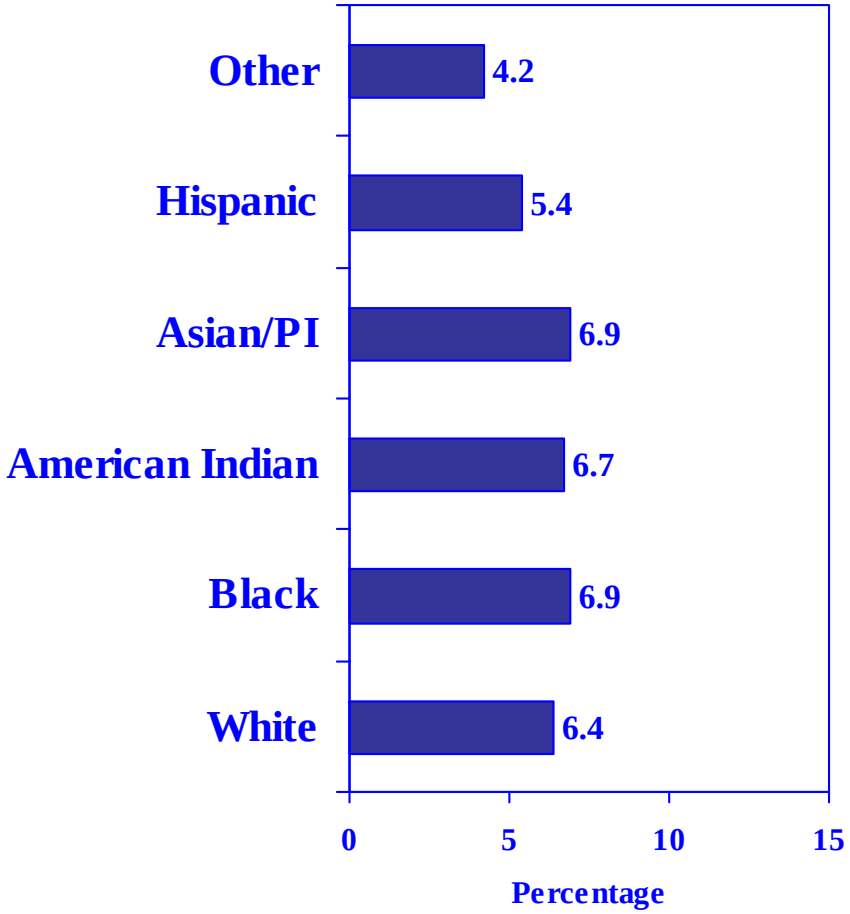
19 of the 52 health centers are located in rural areas.

SCN Database
Age Distribution For Users With Diabetes (n=59,218), 2002



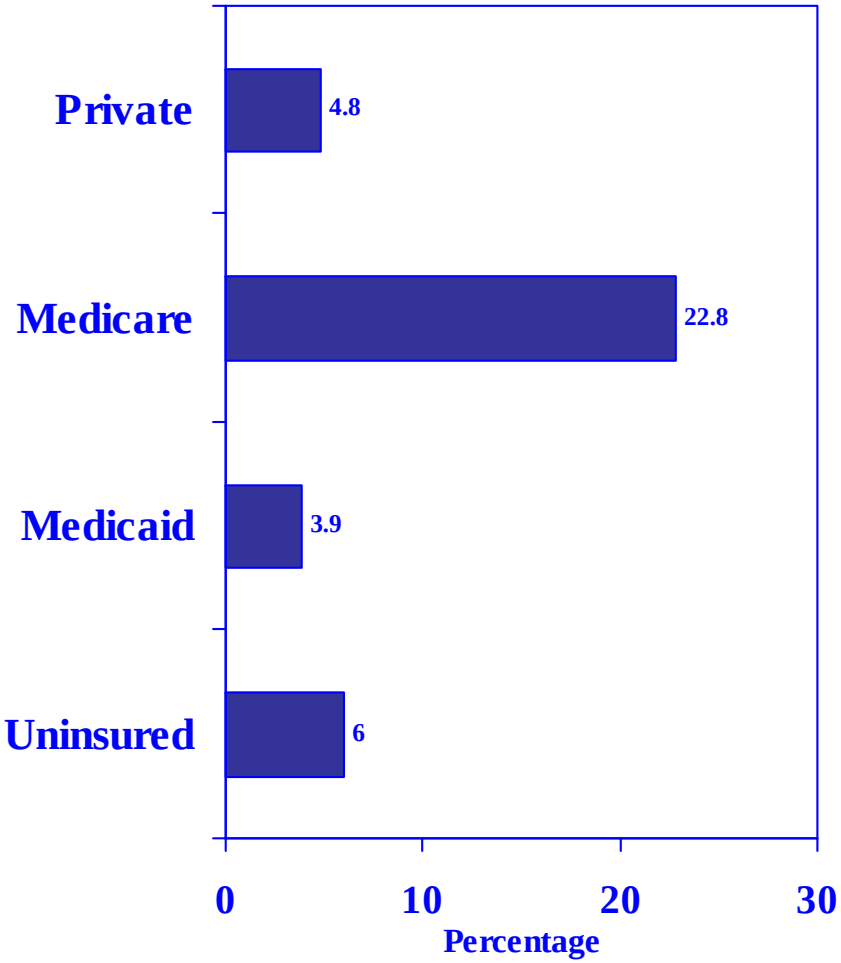
- Overall, 6.2% users had diabetes
- About 1 in 5 elders had diabetes
- About 1 in 2000 children had diabetes

SCN Database
Race/Ethnicity Distribution
Users With Diabetes (n=59,218), 2002



- There were no substantive differences in diabetes prevalence by race/ethnicity

SCN Database
Insurance Status Distribution
Health Center Users With Diabetes (n=59,218), 2002

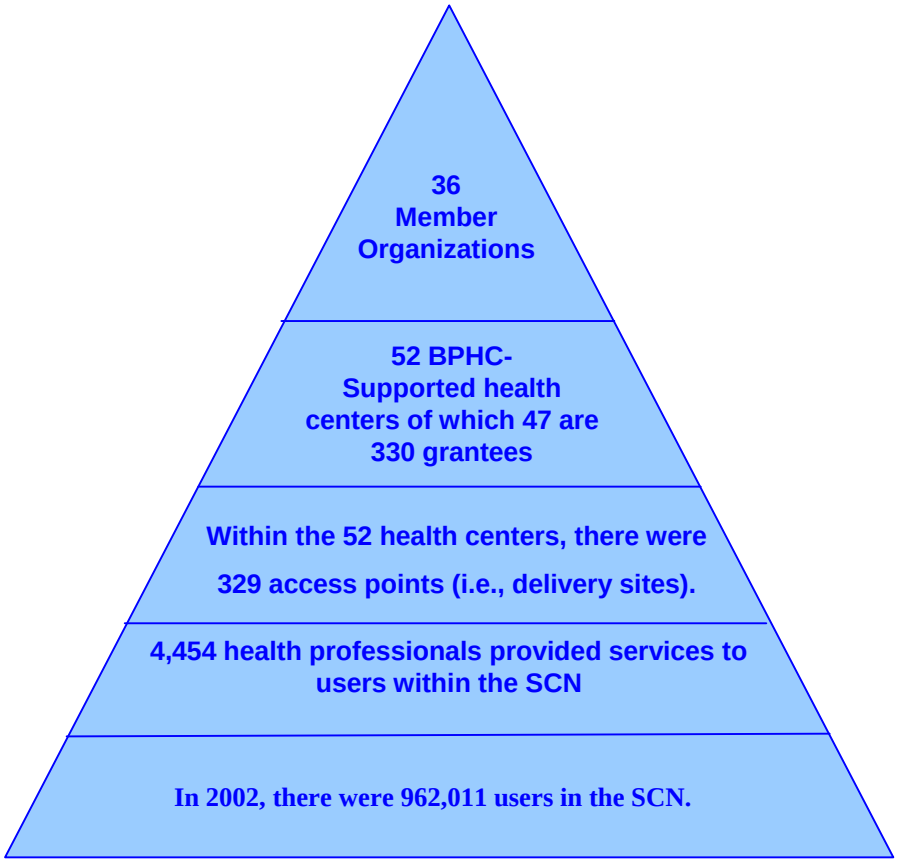


- The high prevalence rate for Medicare is an age related phenomenon.
- The uninsured appear to have a higher burden of diabetes than those with Medicaid or private insurance

The 52 SCN Health Centers by 330 Grant and Integrated Service Delivery Network (ISDN) Participation

	Number
• Single CHC, 330 grantee	29
• CHC, 330 grantees, in ISDNs	
– West Baltimore Integrated Delivery System (MD)	3
– Community Health Center Network (CA)	5
– Health Choice Network (FL)	4
– CISNP (PA)	6
• CHC “Look-Alikes”	5
– 2 are in the one of the ISDNs	

SCN Composition: Summary

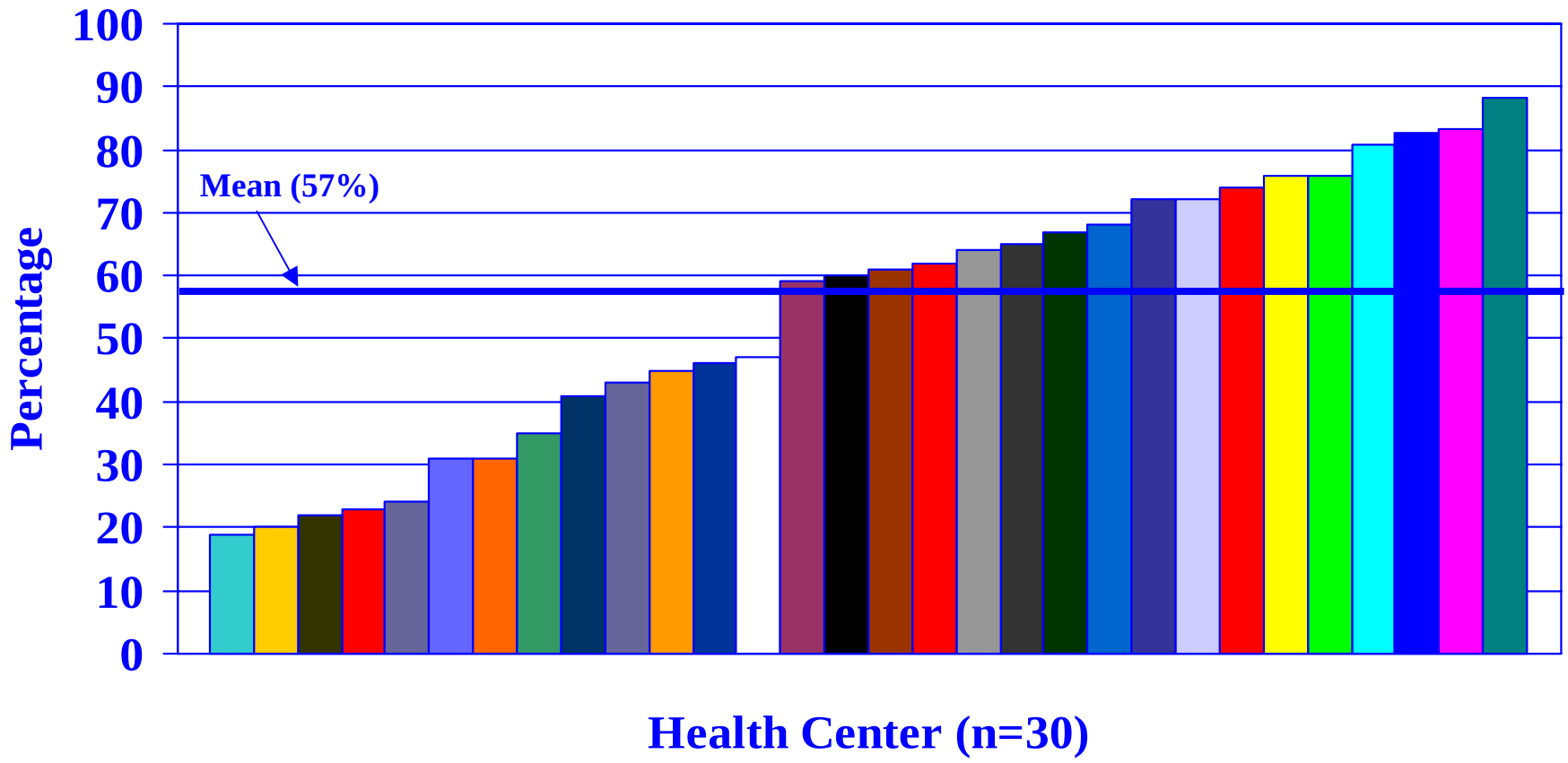


In 2002, there were 962,011 users within the SCN. They had encounters with 4,454 health professionals, who delivered services in 329 unique access points.

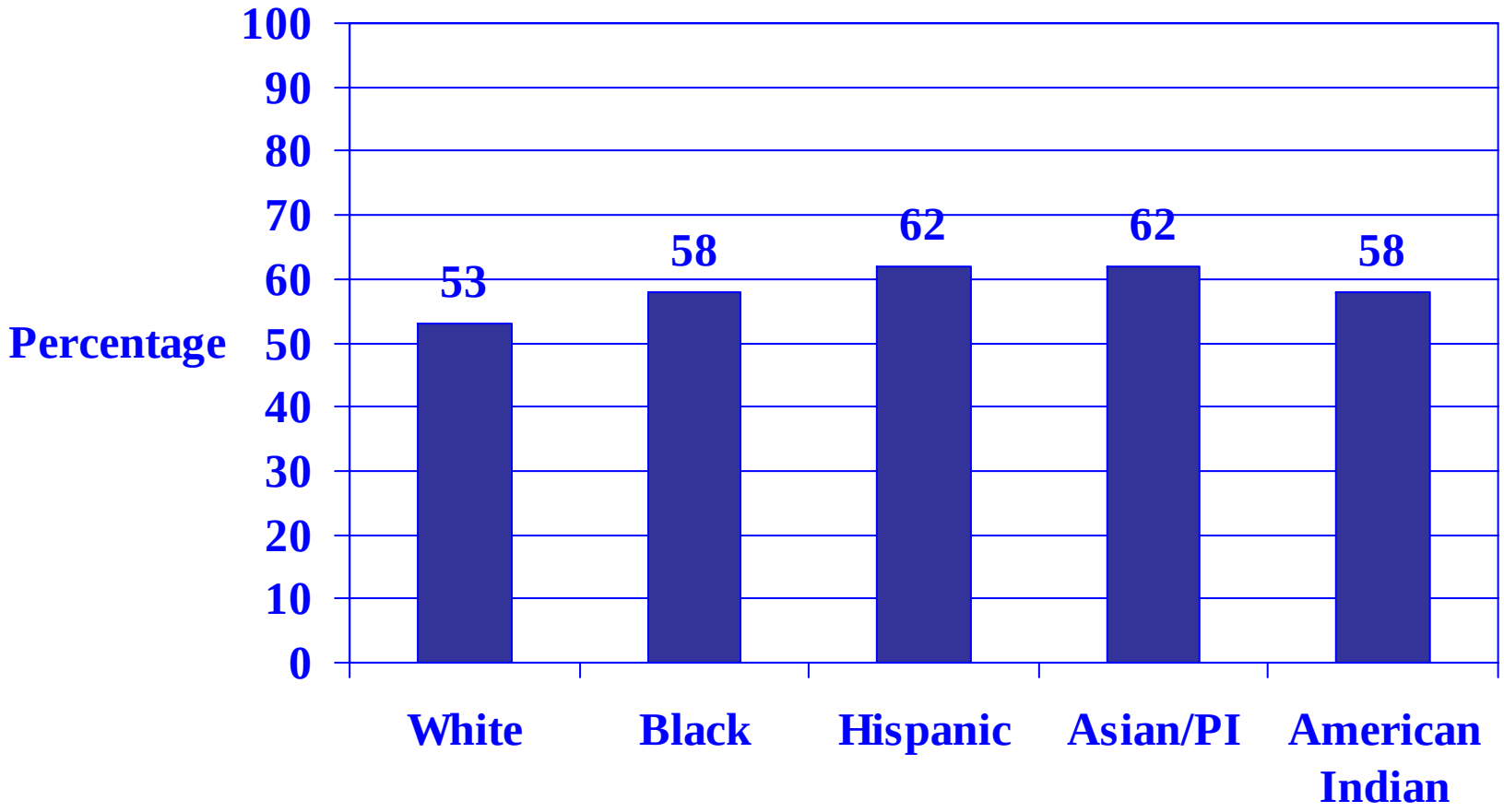
VIII. Profile of Diabetes Users of Health Centers, Data are From the SCN 2002 Database

- All ages included
- Diabetes Types 1+2 included

SCN Data
1+ HbA1C Levels Checked Among Patients with Diabetes During 2002 (n=45,542)

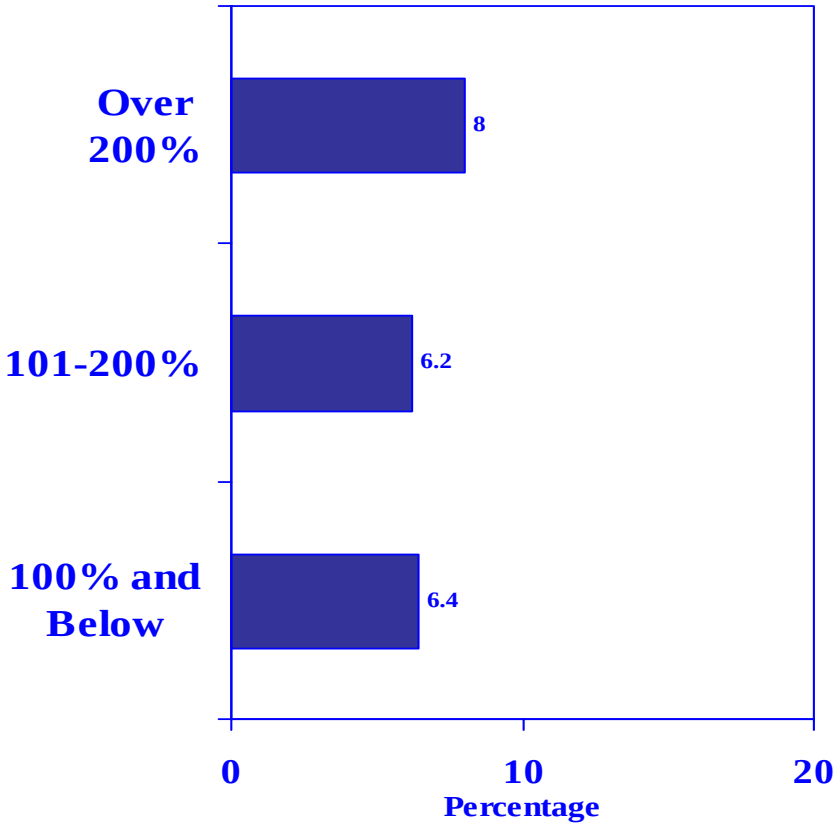


SCN Data 2002
1+ HbA1C Levels Checked Among Patients with Diabetes by Race/Ethnicity (n=45,542),



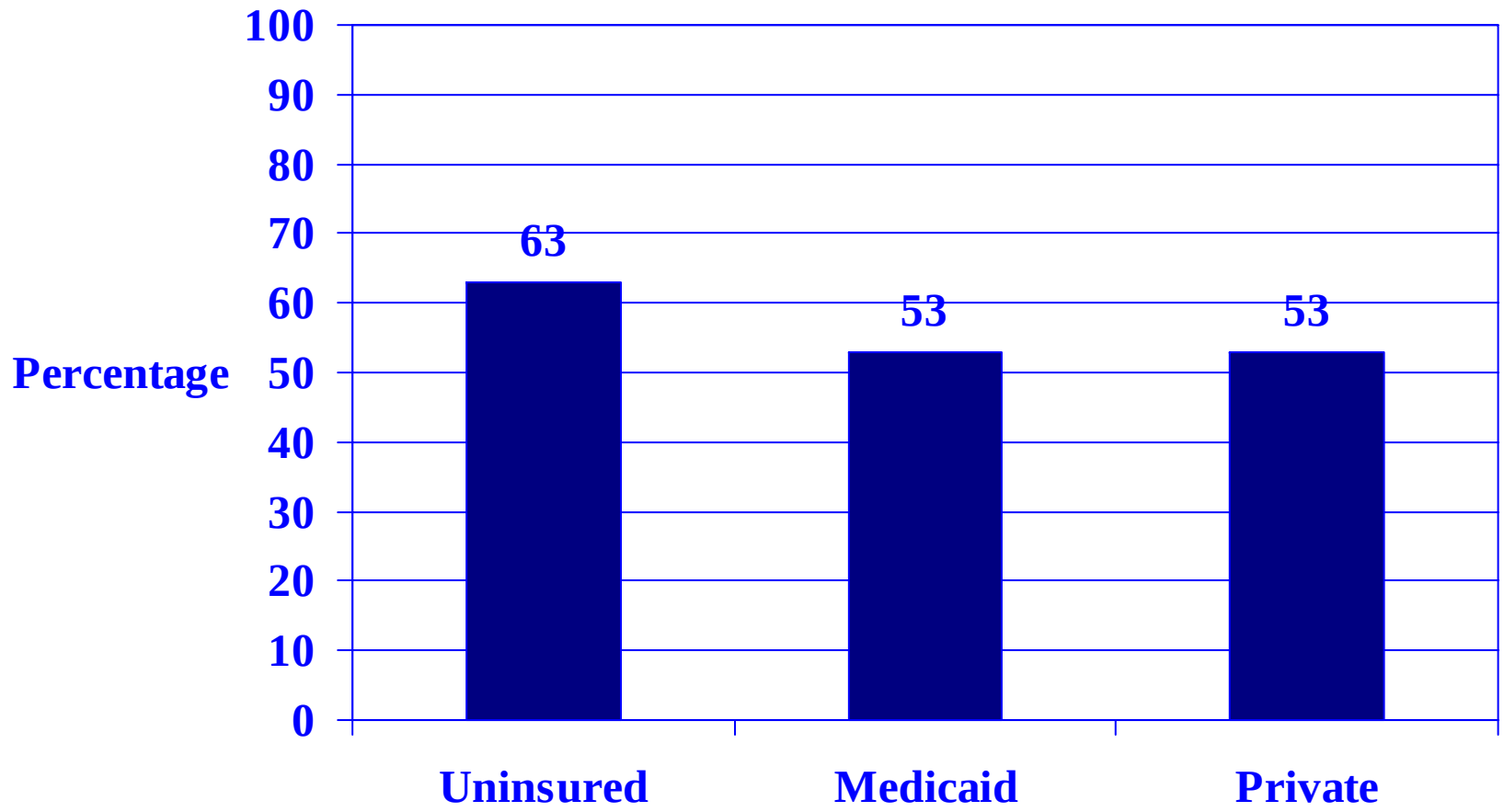
Mean for all patients 57%

SCN Database
Poverty Status Distribution For Users With Diabetes (n=59,218), 2002



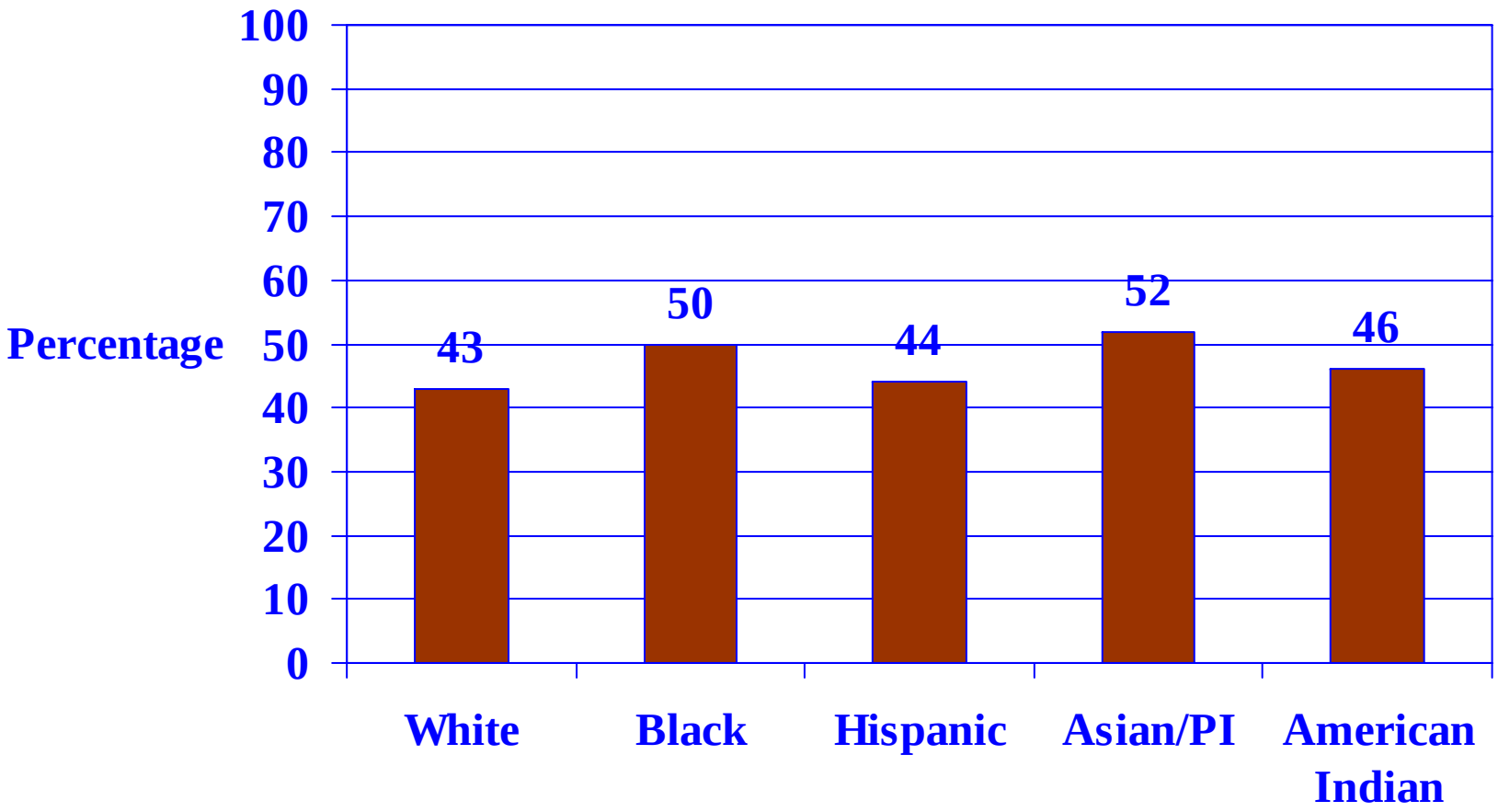
- The higher prevalence for those in the >=200% FPL group is due to more elderly in that group

SCN Data 2002
1+ HbA1C Levels Checked Among Patients with Diabetes by Insurance Status (n=45,542),

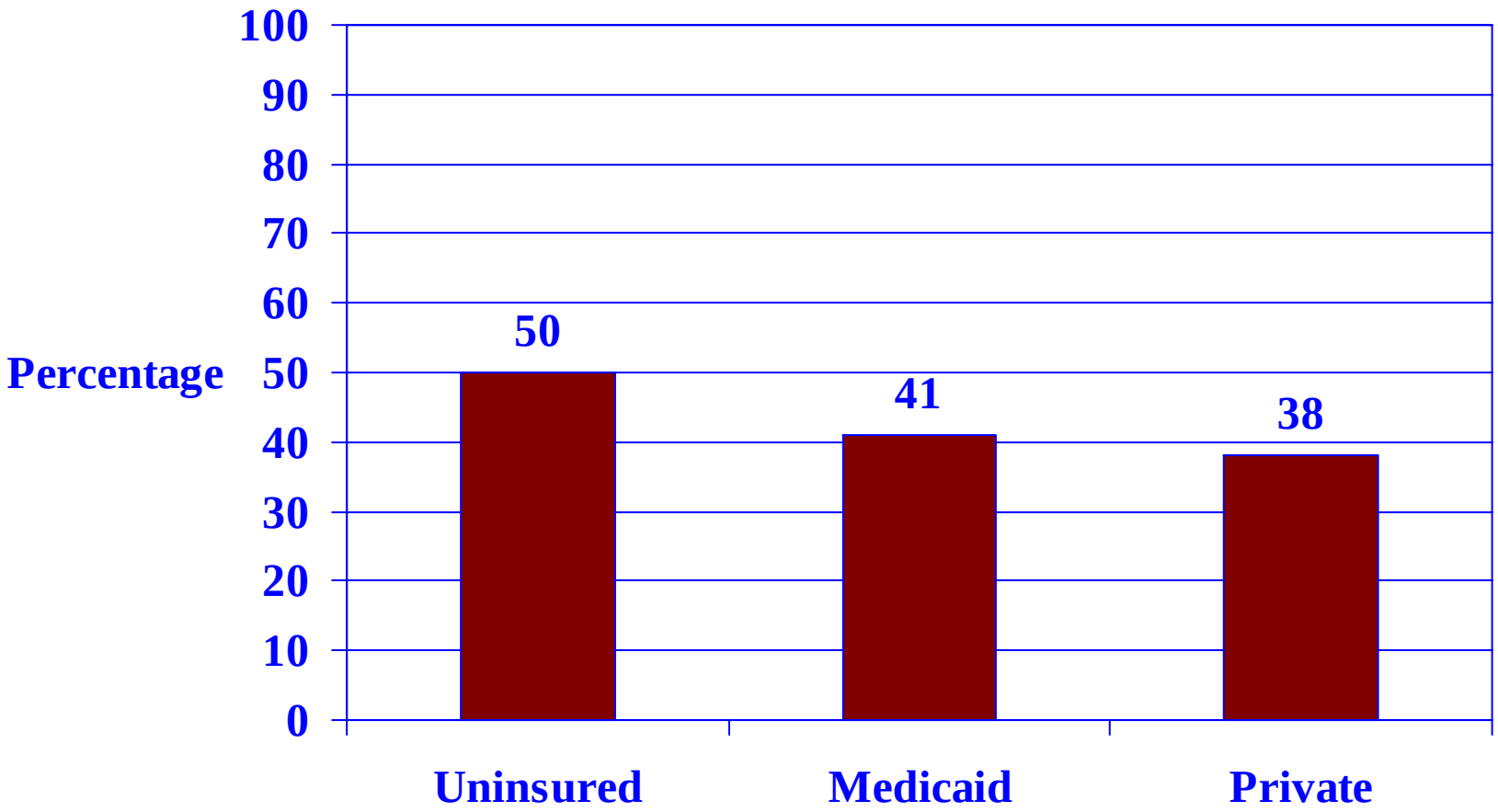


Mean for all patients in SCN data 57%

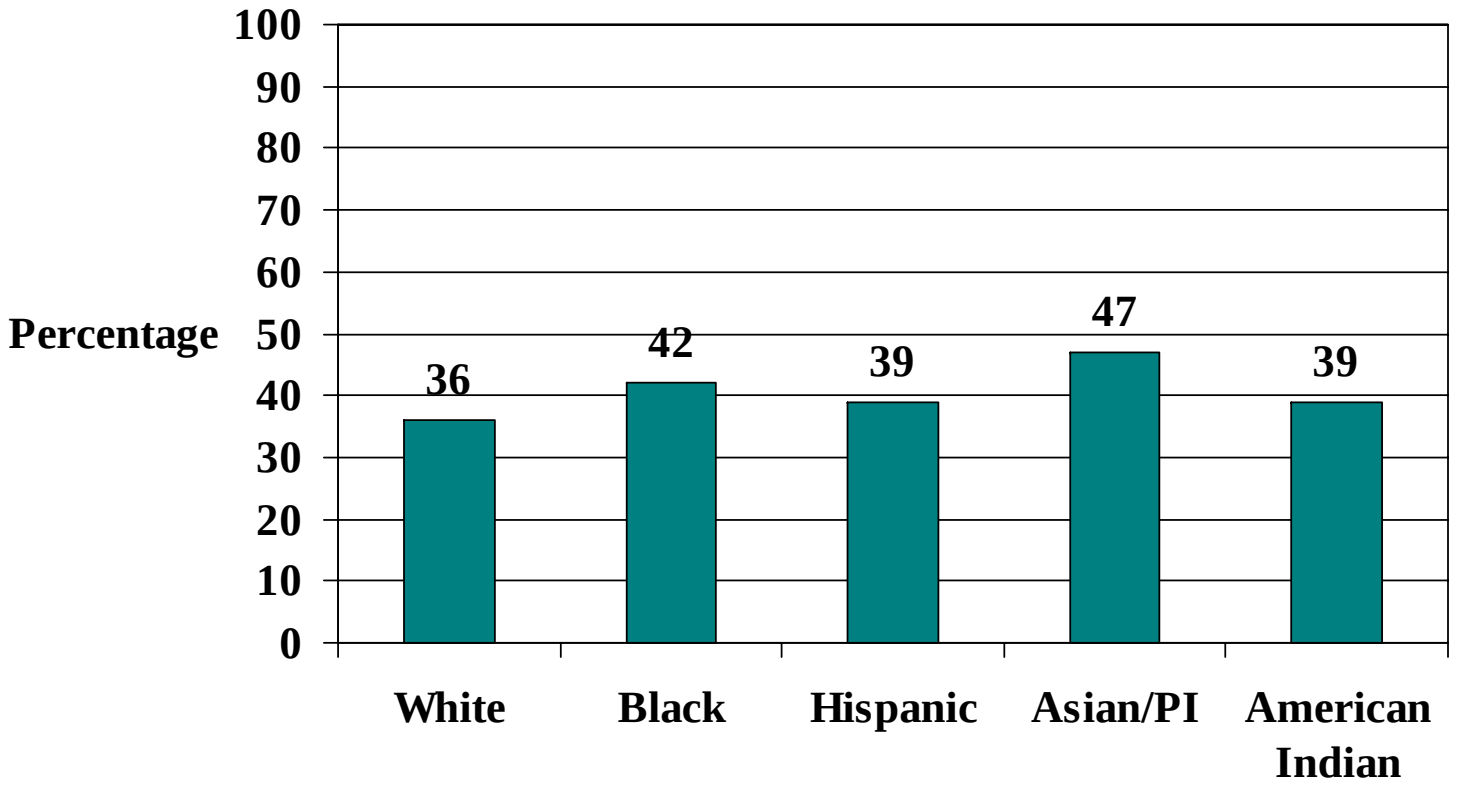
Lipid Screening Checked Among Patients with Diabetes by Race/Ethnicity (n=45,542), SCN 2002



Lipid Screening Checked Among Patients with Diabetes by Insurance Status (n=45,542), SCN 2002



Both 1+ HbA1C Levels and Lipid Screening Checked Among Patients with Diabetes , by Race/Ethnicity , SCN 2002



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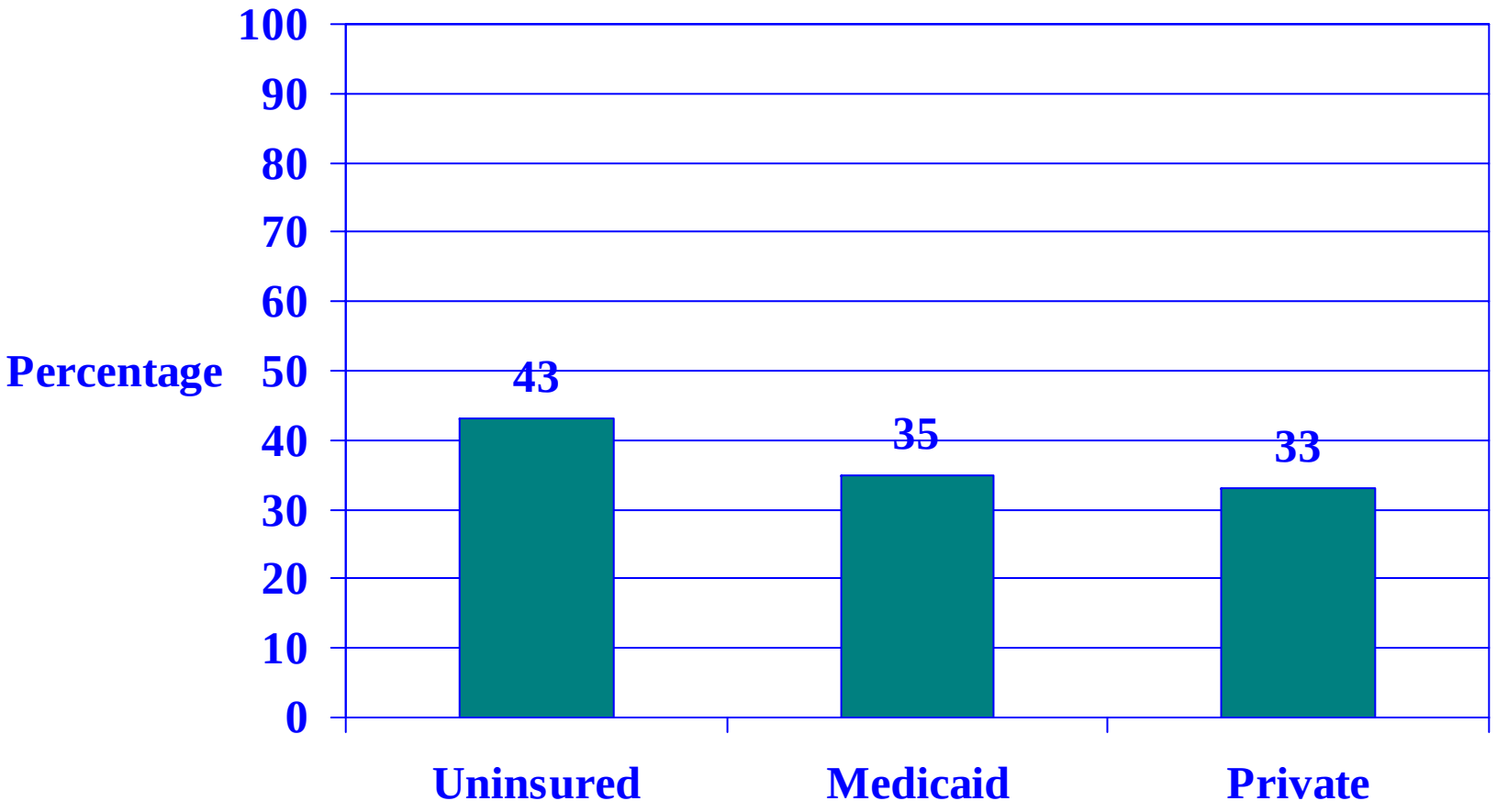

Use Of Services and Charge For Patients With Diabetes

Service/Charge	Diabetes		Ratio
	Yes	No	
Encounters, Mean	7.8	3.5	2.2
Visits, Mean	5.7	2.9	2
Charge, Mean	595	306	1.9
Lab Charge, Mean	684	483	1.4
Image Charge, Mean	1165	835	1.4

Contact information

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Center for Quality http://www.hrsa.gov/quality/

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U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration